Appl. No. 10/007,331 Amdt. dated October 15, 2003 Reply to Office Action of September 23, 2003

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

Claims 1-56 (Canceled)

57. (Previously presented) A commercial-scale method for *in vitro* sialylation of terminal galactose residues on a glycoprotein, said method comprising contacting said glycoprotein with a reaction mixture that comprises a sialyltransferase, a sialic acid donor moiety, and other reactants required for sialyltransferase activity, for a sufficient time and under appropriate conditions to transfer sialic acid from said sialic acid donor moiety to said terminal galactose residues.

## 58. (Canceled)

- 59. (Currently amended) A method for *in vitro* sialylation of terminal galactose residues present on a glycoprotein, said method comprising contacting said glycoprotein with a reaction mixture that comprises a sialyltransferase, wherein the sialyltransferase is a bacterial sialyltransferase, a sialic acid donor moiety, and other reactants required for sialyltransferase activity, for a sufficient time and under appropriate conditions to transfer sialic acid from said sialic acid donor moiety to said terminal galactose residues The method of claim 57, wherein a greater percentage of terminal galactose residues are sialylated compared to an unaltered glycoprotein.
- 60. (Previously presented) The method of claim 59, wherein at least 80% of the terminal galactose residues present on the glycoprotein are sialylated.

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- 61. (Previously presented) The method of claim 60, wherein at least 90% of the terminal galactose residues present on the glycoprotein are sialylated.
- 62. (Previously presented) The method of claim 57, wherein the terminal galactose residues comprise one or more saccharides selected from the group consisting of Galβ1,4GlcNAc, Galβ1,4GalNAc, Galβ1,3GalNAc, Galβ1,3GlcNAc, Galβ1,3Ara, Galβ1,6GlcNAc, and Galβ1,4Glc.
- 63. (Previously presented) The method of claim 62, wherein the terminal galactose residues comprise Galβ1,4GlcNAc or Galβ1,3GlcNAc.
- 64. (Previously presented) The method of claim 63, wherein at least 80% of the terminal Galβ1,4GlcNAc residues present on the glycoprotein are sialylated.
- 65. (Previously presented) The method of claim 63, wherein at least 80% of the terminal Galß1,3GlcNAc residues present on the glycoprotein are sialylated.
- 66. (Previously presented) The method of claim 59 57, wherein the terminal galactose residues are present on an O-linked oligosaccharide.
- 67. (Previously presented) The method of claim 59 57, wherein the terminal galactose residues are present on an N-linked oligosaccharide.
- 68. (Previously presented) The method of claim 59 57, wherein the sialyltransferase includes a sialyl motif which has an amino acid sequence that is at least about 40% identical to a sialyl motif from a sialyltransferase selected from the group consisting of ST3Gal I, ST6Gal I, and ST3Gal III.

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- 69. (Previously presented) The method of claim 68, wherein the sialyltransferase is an ST3Gal III.
- 70. (Previously presented) The method of claim 69, wherein the sialyltransferase is a rat ST3Gal III.

71-100 (Canceled)

101. (Previously presented ) The method of claim 57, wherein the glycoprotein comprises an immunoglobulin.

102-111 (Canceled)